Flood News for Michigan Floodplain Managers

A quarterly newsletter of the
Land and Water Management Division
Michigan Department of Environmental Quality
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Russell J. Harding, Director John Engler, Governor September 2002

REMEDIATION OF FLOODPLAIN VIOLATIONS

(David Schein, FEMA, Region V, Chicago)

Much time is spent discussing how to correct violations of local floodplain ordinances. Communities participating in the National Flood Insurance Program (NFIP) are expected to deal aggressively with documented cases of these violations. Even the best of NFIP-compliant communities may have a violation of one sort or another.

The FEMA expects communities to 1) correct the violation to the maximum extent practicable and 2) fully correct any administrative deficiencies that may have led to the violation. The fact is that where violations exist, it is usually the community officials that failed to enforce the floodplain ordinance, rather than the builder failing to comply with its terms and conditions. This presents a dilemma.

If the builder violated the ordinance's requirements, it is a rather straightforward matter to bring an action, administrative or legal, to have the violation corrected. Ordinance penalty clauses and police powers are usually sufficient. But when the community itself fails to implement its own ordinance (again, which is the most likely circumstance in our experience), the universe of corrective actions available to the local official shrinks. However, the FEMA doesn't care who caused the violation; they just want it corrected, and will hold the community's feet to the fire to get it done.

Traditionally, courts have held that, in the normal course of doing business to the protect the health, welfare, and safety, a community official who errs is generally held immune to legal action (provided no fraud, negligence, etc. is demonstrated). In other words, mistakes happen.

However, when the floodplain ordinance is ignored, the structure and its inhabitants end up in harm's way. The community and owner are left with a hard-to-market home or business, with inordinately high flood insurance premiums. The community is left with a black mark because it is now on the FEMA's "list" as a result of the local official's failure. The community must attack these kinds of violations with the same vigor it would tackle a violation caused by the builder thumbing his/her nose at the local floodplain management office.

How is the community to remedy such violations caused by its own failure? Well, first it must own up to it. Next, it should notify the owner of the violation and oversight. Then, it should meet with the owner and discuss remedial actions. The FEMA and the State NFIP Coordinator can help with ideas for these negotiations. Naturally, the owner will be upset and will not expect to pay for any remediation.

The community should investigate filing an "Errors and Omissions" claim with its liability insurance carrier. The oversight might be a covered circumstance. Regardless of how the costs of remediation are paid, the violation needs to be corrected. Even with Tort Immunity, the FEMA and the State will hold the community responsible for correcting the violation. The federal government and the National Flood Insurance Fund are exposed to liability for flood damage by the community's error.

All practicable remedies need to be explored to bring the violation into substantial compliance. This could even mean purchase of the structure by the community and its removal or relocation. Obviously, the message here is "Don't fail to apply and enforce your floodplain ordinance!"

Unlike violations to other parts of the development code, when a structure is allowed to be built in violation of the floodplain rules, the violation is likely to be severe, such as the building being several feet too low, and remediation presents unique challenges. While jacking up the structure to the flood protection elevation would provide the best protection, and probably make it fully compliant, it is also very problematic and expensive.

However, the FEMA will recognize community efforts that achieve less than full compliance if the administrative deficiencies have been remedied and the structure is brought into substantial compliance. This can mean:

- The utilities are protected (often elevated or relocated);
- Floodwaters can be diverted from the structure (berming);
- Lower levels can be made "wet-floodproofed" and uninhabitable;
- Further improvements are prohibited;
- The structure has accurate actuarial rating for flood insurance (a current elevation certificate has been sent to the FEMA);
- Some elevation or structural dry-flood proofing can be accomplished; and
- The violation is recorded on the deed or title.

These, taken together, are the minimum efforts the FEMA wants to see a community implement to remedy floodplain violations to the maximum extent practicable.

F-MIT AND FIRMettes

(FEMA's Watermark, Summer 2002)

The FEMA introduced F-MIT (Flood Map Image Tool) software for viewing and capturing any of the NFIP's more than 100,000 Flood Insurance Rate Maps (FIRMs). Optimized for on-screen display of scanned flood maps, F-MIT allows users to pan and zoom within a map, select an area of interest, and print a "FIRMette." The FIRMette includes the map title block, north arrow, and scale bar. Because a FIRMette is a same-scale "clip" of an official NFIP flood map image, it can be used in all aspects of the NFIP, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements.

This new technology allows users to view, print, email, and save the FIRMette free of charge. Help screens assist users in navigating the entire inventory of scanned flood map images. F-MIT runs under Microsoft Windows 95/98/NT/ME/2000 operating systems and is compatible with most printers and some large-format graphics plotters.

The FEMA Map Service Center (MSC) provides a one-time free copy of F-MIT Version 1.0 on CD-ROM with each paid order of scanned FIRM images. The free software also can be downloaded from the MSC web site (www.msc.fema.gov). The web site has a “finder” tool that allows more frequent users to locate images of interest by typing in a street address. Once the image is found, a web-based version of F-MIT lets you run the application without having to download the software.

Future versions of F-MIT will include GIS functions that work with digital FIRM (DFIRM) data or other data but will be tailored to DFIRM data and specific floodplain management and insurance tasks.

How to Obtain a FIRMette

1. Go to www.msc.fema.gov
2. Select "The FEMA Flood Map Store"
3. Select "Catalog"
4. Select "FEMA issued Flood Maps"
5. #1 – Under "Select Media Type," select "On line"
6. #2 – Select State
7. #3 – Select County
8. #4 – Select Community
9. #5 – Select "Find FEMA issued flood maps!"
10. Click on the box under "Select" for the index or map panel you want. Index panels are shown with "IND" under the "Item ID."
11. Select "View" to the right of the listed panel.
12. Use the Zoom tools to better see the details.
13. When you’re ready to print, use Max Zoom Out.
14. Select the "Make a FIRMette" button.
15. #1 – Select your paper size.
16. #2 – Select the three areas that will be printed. When selected, each will be a brown box with a green border. Move the boxes to the areas you want to reproduce. Note that the panel title and scale boxes are often not centered just right.
17. #3 – Select the format you wish to use in printing—Adobe PDF or TIFF Image.
18. Select "Save your FIRMette." You must save the file and then print from the file to get the proper map size and page distribution. You may need to rotate the file before printing.
19. Print the file.

MICHIGAN'S BIG 10 IN CLAIMS

(George Hosek, Land and Water Management Division (LWMD),
Michigan Department of Environmental Quality (MDEQ)

The FEMA routinely provides community flood insurance statistics to the State Coordinator for the NFIP. Included in the accounting is the dollar amount of claims paid out since 1978. The following listing represents Michigan's top (or bottom) communities based on claims paid for flood damages.

Community	Flood Claims Paid
Gibraltar, City of	$1.79 million
Farmington Hills, City of	$1.60 million
Grand Rapids, City of	$1.39 million
Midland, City of	$1.24 million
Luna Pier, City of	$1.11 million
LaSalle Township	$1.08 million
Frenchtown Township	$1.07 million
Clay Township	$1.07 million
Erie Township	$ .72 million
Monroe Township	$ .59 million

These figures are based on the April 25, 2002 report.

CITY OF VASSAR AWARD WINNER

(George Hosek, LWMD, MDEQ)

At its annual meeting in Phoenix, Arizona, the Association of State Floodplain Managers recognized outstanding individuals, communities, projects, and programs in floodplain management.

The City of Vassar (City), Michigan, was awarded the Sheaffer Flood-proofing Award. After being flooded 20 times in the last century, the most severe in 1986, the City Council implemented a flood mitigation plan that identified over 30 options the City could use to simultaneously reduce flood damage and still maintain a needed property tax base. Using Flood Mitigation Assistance Program funds, the City began a campaign to find owners of flood-prone properties who were interested in elevating their homes. Four homes were elevated in 2001 and two more will be raised this summer.

As the success of these elevation projects is demonstrated, additional property owners are expected to take advantage of the program. Congratulations to the City of Vassar and to Brian Kischnick, former City Manager, for his leadership and vision. Also, congratulations are in order to Wallace Wilson, W. A. Wilson Consulting Services in Williamston, Michigan, and Clancy Philipsborn, the Mitigation Assistance Corporation in Boulder, Colorado, for their work in producing the City's multi hazard mitigation plan, which formed the basis for the flood-proofing project.

MICHIGAN HAZARDS: DID YOU KNOW?

(EMD PUB-103, December 2001,
Emergency Management Division, Michigan Department of State Police)

- The highest temperature ever recorded in Michigan was 112 degrees Fahrenheit, on July 13, 1936, in Mio. The lowest temperature ever recorded in Michigan was -51 degrees Fahrenheit, on February 9, 1934, in Vanderbilt.
- Michigan has in excess of 24 million scrap tires in disposal sites scattered around the State.
- In 1998, a structural fire occurred in Michigan every 27 minutes, 37 seconds.
- Forests cover approximately 49 percent of Michigan's total land base. The large number of seasonal and permanent homes in forested areas has greatly increased the risk from wildfires.
- Lightning strikes cause only two percent of all wildfires in Michigan; the rest are caused by human activity.
- The Michigan Department of Environmental Quality has documented approximately 278 dam failures in Michigan.
- Approximately six percent of Michigan's land is flood-prone, which includes about 200,000 buildings.
- Michigan's annual flood-related damages are estimated to be between $60 and $100 million.
- Michigan has over 3,200 miles of coastline (the longest freshwater coastline in the world) that is home to more than 4.8 million people.
- Michigan has 2,983 hazardous material sites subject to the emergency planning requirements under the Federal Emergency Planning and Community Right-to-Know Act (SARA Title III).
- From 1994-1998, a reportable fixed-site hazardous material incident occurred in Michigan approximately every 15.2 days. During that same period, a reportable hazardous material transportation incident occurred in Michigan approximately every 9.1 days.
- In 1977, the worst outbreak of botulism in U.S. history was linked to home canned jalapeno peppers served by an Oakland County restaurant.
- The 1973 accidental mixing of Polybrominated Biphenyl (PBB) with livestock feed supplement caused an environmental and public health disaster in Michigan of unprecedented magnitude.
- Michigan was one of the first states in the U.S. to be the target of a major act of terrorism when a bomb was set off in a schoolhouse in Bath on May 18, 1927, killing 38 children and 3 teachers and injuring 58 others. This incident remains the worst school-related attack in U.S. history.

- The Lower Peninsula experiences 30-60 thunderstorm days per year, while the Upper Peninsula experiences approximately 20-30 thunderstorm days per year.

- Lightning strikes can generate current levels of 30,000 to 40,000 amperes, with air temperatures often superheated to higher than 50,000 degrees Fahrenheit (hotter than the surface of the sun).

- Since 1970, severe wind events in Michigan (not including tornadoes) have caused 115 deaths, over 660 injuries, and hundreds of millions of dollars in property and agricultural damage.

- From 1950 – July 2001, Michigan experienced a total of 927 tornadoes that caused 239 deaths, an average of 18 tornadoes and 5 tornado-related deaths per year.

- The June 8, 1953 tornado in Flint—Michigan's worst storm to date—is ranked 9th on the top ten list of single killer tornadoes that have occurred in the U.S. It was also the last single tornado in the U.S. to cause over 100 deaths.

NEWSLETTER CHANGES

(George Hosek, LWMD, MDEQ)

"Flood News for Michigan Floodplain Managers" has been in existence for fifteen years. It now reaches 2700 communities, county officials, and consultants four times annually.

Over those years, Cheryl Gates and George Hosek of the Land and Water Management Division of the MDEQ have produced nearly 60 issues. With this issue, the publisher and editor (Cheryl and George) announce their retirements, effective November 1, 2002.

It has been a pleasure to bring you "Flood News." We hope it has been helpful to you in your efforts to protect your fellow citizens from flood losses, improve floodplain management at the local level, and keep you informed of floodplain management changes at the Federal and State level.

After nearly 70 years of combined public service, we bid you a fond farewell!

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